

CLAIMS

What is claimed is:

- 1 1. A processor, comprising:
2 a predicate predictor to determine a predicted predicate value and
3 a confidence value for a first instruction with a predicate; and
4 a micro-op generator to issue a first set of micro-ops
5 corresponding to said first instruction when said confidence value is
6 high and a second set of micro-ops corresponding to said first
7 instruction when said confidence value is low.
- 1 2. The processor of claim 1, wherein said first set of micro-ops
2 includes a check micro-op.
- 1 3. The processor of claim 2, wherein said check micro-op is to
2 check for a calculated value of said predicate of true when said
3 predicted predicate value is true.
- 1 4. The processor of claim 3, wherein said check micro-op is to
2 initiate a recovery when said calculated value is false.
- 1 5. The processor of claim 3, wherein said first set of micro-ops
2 includes a first micro-op corresponding to said first instruction without
3 predicate.

1 6. The processor of claim 2, wherein said check micro-op is to
2 check for a calculated value of said predicate of false when said
3 predicted predicate value is false.

1 7. The processor of claim 6, wherein said check micro-op is to
2 initiate a recovery when said calculated value is true.

1 8. The processor of claim 1, wherein said second set of micro-
2 ops includes a micro-op corresponding to said first instruction without
3 predicate.

1 9. The processor of claim 8, wherein said second set of micro-
2 ops includes a conditional move micro-op.

1 10. A method, comprising:
2 determining a predicted predicate value for a first instruction with
3 a predicate;
4 determining a confidence value for said predicted predicate value;
5 and
6 issuing a set of micro-ops corresponding to said first instruction
7 responsive to said confidence value.

1 11. The method of claim 10, wherein said set of micro-ops
2 includes a check micro-op when said confidence value is high.

1 12. The method of claim 11, wherein said check micro-op
2 checks for a calculated value of said predicate of true when said
3 predicted predicate value is true.

1 13. The method of claim 12, further comprising initiating a
2 recovery when said calculated value of said predicate is false.

1 14. The method of claim 12, further comprising issuing a first
2 micro-op corresponding to said instruction without predicate.

1 15. The method of claim 11, wherein said check micro-op
2 checks for a calculated value of said predicate of true when said
3 predicted predicate value is false.

1 16. The method of claim 15, further comprising initiating a
2 recovery when said calculated value of said predicate is true.

1 17. The method of claim 10, wherein said set of micro-ops
2 includes a conditional move micro-op when said confidence value is
3 low.

1 18. A system, comprising:
2 a processor including a predicate predictor to determine a
3 predicted predicate value and a confidence value for a first instruction
4 with a predicate, and a micro-op generator to issue a first set of micro-
5 ops corresponding to said first instruction when said confidence value

6 is high and a second set of micro-ops corresponding to said first
7 instruction when said confidence value is low;
8 an interface to couple said processor to input-output devices; and
9 an audio input-output coupled to said interface and said
10 processor.

1 19. The system of claim 18, wherein said first set of micro-ops
2 includes a check micro-op.

1 20. The system of claim 19, wherein said check micro-op is to
2 check for a calculated value of said predicate of true when said
3 predicted predicate value is true.

1 21. The system of claim 20, wherein said check micro-op is to
2 initiate a recovery when said calculated value is false.

1 22. The system of claim 21, wherein said first set of micro-ops
2 includes a first micro-op corresponding to said first instruction without
3 predicate.

1 23. The system of claim 19, wherein said check micro-op is to
2 check for a calculated value of said predicate of false when said
3 predicted predicate value is false.

1 24. The system of claim 23, wherein said check micro-op is to
2 initiate a recovery when said calculated value is true.

1 25. The system of claim 18, wherein said second set of micro-
2 ops includes a micro-op corresponding to said first instruction without
3 predicate.

1 26. The system of claim 25, wherein said second set of micro-
2 ops includes a conditional move micro-op.

1 27. An apparatus, comprising:
2 means for determining a predicted predicate value for a first
3 instruction with a predicate;
4 means for determining a confidence value for said predicted
5 predicate value; and
6 means for issuing a set of micro-ops corresponding to said first
7 instruction responsive to said confidence value.

1 28. The apparatus of claim 27, wherein said set of micro-ops
2 includes a check micro-op when said confidence value is high.

1 29. The apparatus of claim 28, wherein said check micro-op
2 checks for a calculated value of said predicate of true when said
3 predicted predicate value is true.

1 30. The apparatus of claim 29, further comprising means for
2 initiating a recovery when said calculated value of said predicate is
3 false.

1 31. The apparatus of claim 30, further comprising means for
2 issuing a first micro-op corresponding to said instruction without
3 predicate.

1 32. The apparatus of claim 28, wherein said check micro-op
2 checks for a calculated value of said predicate of true when said
3 predicted predicate value is false.

1 33. The apparatus of claim 32, further comprising means for
2 initiating a recovery when said calculated value of said predicate is true.

1 34. The apparatus of claim 27, wherein said set of micro-ops
2 includes a conditional move micro-op when said confidence value is
3 low.